Work Order ID 57277

March 31, 2010 12:43:12 PM

Required Date: 09/04/2010



Page 1

Item ID:

D412-702-052B

Accept

Setup Start

Revision ID:

Item Name: 1-Man Shoulder Harness, RH, 3 point

Stop



Start Date:

31/03/2010

Start Qty: 4.00 Req'd Qty: 4.00

Cust Item ID: Customer:

Reference:

Approvals:

Process Plan:

Tooling:

Date:

Start



QC:

Revision Nbr

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID

Draw Nbr

Operation Description

Set Up/ Run Hours

Draw Number

Draw Plan Rev. Code

Accept Qty

Reject Qty

Run

Reject Number Stamp

Insp.

DSI9397

Rev A

100

Document Control

DOCUMENT CONTROL

Memo

0.00

0.00

Photocopy bluefile & type labels per PPP D412-702-052B CHG002

100.1

PICK KIT

110

0.00

0.00

Quality Control

Memo

QC4- 100% Inspect kits for completeness

120

Packaging

0.00

Packaging

Memo

0.00

Packaging Identify and pack for shipping as per PPP D412-702-052B

Location:

PPP Rev:

BG 10/04/13

W/0:57	1277	WORK ORDER C	HANGES				>
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10/04/13	loo .1	ADD "Pick Kir" Ream. Change	A	10.0H.13		9	

Part No: 9412-702-052 B PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
Resolution:	Disposition:	QA: N/C Closed:	Date:

NCR:			WORK ORDI	ER NON-CONFORMAN	CE (NCR)			
DATE		Description of NC	Corrective Action Section B		Verification	Annessal	Ammuouni	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector
								-
								1

Work Order ID 57277

March 31, 2010 12:43:12 PM



Page 2

Item ID:

D412-702-052B

Accept

Revision ID:

Item Name:

1-Man Shoulder Harness, RH, 3 point

Start Date:

31/03/2010

Req'd Qty: 4.00

Operation

Description

Reference:

Start Qty: 4.00 Required Date: 09/04/2010

QC21- Final Inspection - Work Order Release



Setup Start

Stop



Cust Item ID: Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

OC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID

130

Quality Control

Memo

Set Up/ Run Hours

0.00

0.00

Draw Number Draw Plan Rev. Code Accept Qty

Reject Qty

Reject Number

Insp. Stamp

Dart	Aeros	pace	Ltd
			-

	1000								•
W/O:			٧	VORK ORDER CHANG	ES				>
DATE	STEP	PRO	OCEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Ca	tegory:	NCR: Yes	No DQ	A:	Date:	
		esolution:							
NCR:		1	WORK OR	DER NON-CONFORM	ANCE (NC	R)			
DATE	STEP	Describtion of NC			Section B Verification			Approval	Approval
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date	& Secti	ion C	Chief Eng	QC Inspector
									-
					9				
									-

March 31, 2010 12:43:17 PM

Work Order ID: 57277

Parent Item: D412-702-052B

Parent Item Name:

1-Man Shoulder Harness, RH, 3 point Comments:

IPP Rev:A new issue ECN 1070 07-12-03 DD verified by:ec IPP Rev:B now at chg002 ECN1150 08-03-31 DD verified by:



Start Date: 31/03/2010

Start Qty: 4.00

Required Date: 09/04/2010

Required Qty: 4.00

Component Item ID/ Item Name

Item ID AN4-10A 2 P

Replacement Mfg/

Purch Purchased

Primary Item Location No

Last Location Route Seq ID 110

Unit of Measure Each

Oty on Hand 106.0000

Loc Code

Remaining Qty To Pick Issued 8.0000

Qty

Date Issued

Status

Page 1

AN44-4A eyebolt

Purchased

Warehouse Loc Qty Location Main Warehouse ST356 106 103962 108986 9 111425 43 113422 50 Each

110

53.0000

AN960JD416/ 3

NADILLE UNA BALLOUN

Purchased

No

No

Warehouse Loc Qty Loc Code Location Main Warehouse ST362 53 104810 43 104811 10 8.0000

Each

12,0000

Warehouse Loc Qty Loc Code Location Main Warehouse ST357

111279

M113706

Rod4/3 8

W/0: 57277		WORK ORDER CHAN	GES			1,400	>
DATE	STEP	Perm house PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
104/B	拉100	Any -444 m 104866 x1 perkit: Suladist	N	E1. 120 01			Coloulis
		wonte who + com. ADD copy of new Born As Reference.					8 10/04/13

Resolution:	Disposition:	QA: N/C Closed:	Date:	
Part No: 1412-702-052 B PAR #:_	Fault Category:	NCR: Yes No DQA:	Date:	

NCR:			WORK ORDE	ER NON-CONFORMAN	CE (NCR)					
		Description of NC Corrective Action Section B		Posserintian of NC Corrective Action Section B		Description of NC	3	Verification		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector		
								-		
								- 4		
								1		
								2		

March 31, 2010 12:43:17 PM

Work Order ID: 57277

Parent Item:

D412-702-052B

Parent Item Name:

1-Man Shoulder Harness, RH, 3 point

Comments:

IPP Rev:A new issue ECN 1070 07-12-03 DD verified by:ec

IPP Rev:B now at chg002 ECN1150 08-03-31 DD verified by:

Component Item ID/ Item Name AN960JD416U 2 9

Replacement Mfg/ Item ID

Purch Purchased

Manufactured

Bin Primary Item Location No

Last Location Route Seq ID 110

Loc Otv

Unit of Measure Each

Qty on Hand 649,0000

Loc Code

Loc Code

Remaining Oty To Pick 8.0000

Start Qty: 4.00

Otv Issued

ML04056

Start Date: 31/03/2010

Date Issued

Required Date: 09/04/2010

leplas (4)

Required Qty: 4.00

Status

Page 2

Washer Washer

NAS1149 10-4160

Warehouse Location Main Warehouse ST346 105078

110

400 Each

649

54

35

156

23.0000 4.0000

Warehouse Location

Main Warehouse ST245 32606 47140 51309

Loc Qty 23 2

11

10

March 31, 2010 12:43:17 PM

Shop Packet Print

Page 2

W/O:			٧	VORK ORDER CHANGE	S				>
DATE	STEP	PROC	EDURE CH		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	_ Fault Ca	tegory:	NCR: Yes	No DQ	A:	_ Date: _	
	R	esolution:	Disposit	ion:	QA: N/C CI	osed:		_ Date: _	
NCR:		W	ORK OR	DER NON-CONFORMA	NCE (NCF	1)			
DATE	STEP	Description of NC		Corrective Action Section		Verific	ation	Approval	Approval
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date	Secti	on C	Chief Eng	QC Inspector
								* = 38	Ma I

March 31, 2010 12:43:17 PM

Work Order ID: 57277

Parent Item:

D412-702-052B

Parent Item Name:

1-Man Shoulder Harness, RH, 3 point

Comments:

IPP Rev:A new issue ECN 1070 07-12-03 DD verified by:ec IPP Rev:B now at chg002 ECN1150 08-03-31 DD verified by:

Start Date: 31/03/2010

Required Date: 09/04/2010

Start Qtv: 4.00

Required Oty: 4.00

Component	Item	ID/
Item Name		
D3571-3	41	

Replacement	
Item ID	

Mfg/
Purch
Manufactured

	Bin	Primary
	Item	Location
d	No	

y	Last
n	Location

Route
Seq ID
110

Qty on Measure Hand 8.0000

Remaining Qty To Pick Issued 4.0000



Date Issued

Status

Page 3



Wa	rehouse
	Location

Main Warehouse ST245A

47142

Loc Oty

Loc Code





Manufactured

110

Each

33.0000 4.0000

4.0000

Warehouse Loc Qty Loc Code Location

Main Warehouse

ST244A 47144

51650

33 25 8 110 Each



Manufactured

Location Main Warehouse ST244A

55669

Warehouse

Loc Oty

95

95

Loc Code

95.0000

55669

W/O:			W	ORK ORDER CHANG	ES				>
DATE	STEP	PRO	CEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		9.							
Part No	:	PAR #:	Fault Cat	egory:	NCR: Yes	No DQA	:	Date:	
		esolution:							
NCR:		\	WORK ORI	DER NON-CONFORMA	NCE (NCR)				
DATE	STEP	Description of NC		Corrective Action Section		Verific	ation	Approval	Approval
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section		Chief Eng	QC Inspector
									-
		Li .							1
									y 5
	1		1			1		l III	

March 31, 2010 12:43:17 PM

Work Order ID: 57277

Parent Item:

D412-702-052B

Parent Item Name:

1-Man Shoulder Harness, RH, 3 point

Comments:

IPP Rev:A new issue ECN 1070 07-12-03 DD verified by:ec IPP Rev:B now at chg002 ECN1150 08-03-31 DD verified by:

Start Date: 31/03/2010

Required Date: 09/04/2010

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name D3761-1-041

Replacement Mfg/ Item ID

Purch 94 Manufactured Bin Primary Item Location No

Last Location 110

Route Seq ID Each

Unit of Qty on Measure Hand 10.3300

Remaining Qty Qty To Pick Issued 4.0000

57662

Date Issued

Status

Page 4

HOOK & LOOP STRIP

Warehouse	Loc Oty	Loc Code
Location		zoc code
Main Warehouse		
ST	10	
57201	10	
Main Warehouse		
ST086	0.33	
38270	0.33	

D412-702-109B

Manufactured

110

Each 0.0000

Harness Assembly

March 31, 2010 12:43:17 PM

Shop Packet Print

Page 4

Dart Aerospace Li	td
-------------------	----

W/O:			V	ORK ORDER CHANG	ES				
DATE	STEP	PRO	OCEDURE CH	IANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
								- 2	
								16	
Part No	:	PAR #:	Fault Ca	tegory:	NCR: Yes	No DQA:		_ Date:	
		lesolution:							
NCR:		1	WORK OR	DER NON-CONFORMA	NCE (NCR)			
DATE	STEP	Description of NC		Corrective Action Section		Verifica	tion	Approval	Approval
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section		Chief Eng	QC Inspector
									M- E
									-2
									234

March 31, 2010 12:43:17 PM

Work Order ID: 57277

Parent Item:

D412-702-052B

Parent Item Name: 1-Man Shoulder Harness, RH, 3 point

Comments:

IPP Rev:A new issue ECN 1070 07-12-03 DD verified by:ec IPP Rev:B now at chg002 ECN1150 08-03-31 DD verified by:

Start Date: 31/03/2010

Start Qty: 4.00

Required Date: 09/04/2010 Required Qty: 4.00

Component Item ID/ Item Name MS21042L4

Replacement Mfg/ Item ID

Purch Purchased

Purchased

Bin Primary Item Location No

Last Location

Route Seq ID 110

Unit of Measure Each

Qty on Hand 1,914.000 12.0000

Remaining Qty Qty To Pick Issued

Date Issued

Status

Page 5

Warehouse Loc Qty Loc Code Location Main Warehouse ST139 12 111827 12 Main Warehouse ST300 1902

9063

108560

6 184 698 1000 110

6 Each 22.0000

4.0000 L

Warehouse

Location Main Warehouse ST288

No

Loc Oty

22

22

Loc Code

148560

MS24693-S274 /

March 31, 2010 12:43:17 PM

Shop Packet Print

Page 5

Dart Aerospace Ltd	Dart	Aeros	pace	Ltd
--------------------	------	-------	------	-----

	/////								
W/O:			V	VORK ORDER CHANGE	S			•	7*
DATE	STEP	PROC	EDURE CH	IANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Ca	tegory:	NCR: Yes	No DO		Date:	1
		esolution:							
NCR:		W	ORK OR	DER NON-CONFORMAN	ICE (NCR)			
DATE	OTED	Description of NC		Corrective Action Section		Verific	ation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section		Chief Eng	QC Inspector
									711
									7
									-1.6
	i	× , **							
									4 3

HEFERENCE ONLY

QTY -051A	QTY -052A	-051B	QTY -052B	Part Number	Description
Х				D412-702-051A	1-Man 3-Point LH Shoulder Harness Ki
-	X			D412-702-052A	1-Man 3-Point RH Shoulder Harness Ki
11		Х		D412-702-051B	1-Man 3 Point III Of the Harness Ki
			х	D412-702-052B	1-Man 3-Point LH Shoulder Harness Ki
1					1-Man 3-Point RH Shoulder Harness Ki
1*	-			D412-702-107A	HARNESS ASSEMBLY
1*	-			D3573-3	ADAPTER
1*				D3579-042	SHOULDER HARNESS
4*				K6.2	CLIP
4"	-			MS24693S272	SCREW
4*	-	-		AN960JD10LL	WASHER
				MS21042L3	NUT
1	1			D412-702-109A	HARNESS ASSEMBLY
	15			D3573-3	ADAPTER
-	1*			D3579-041	SHOULDER HARNESS
	1*			K6.2	CLIP
	4*		1	MS24693S272	SCREW
	4*		1	AN960JD10LL	WASHER
	4*		ı	MS21042L3	NUT
		1	ı	0412-702-107B	
-	-	1*		03573-3	HARNESS ASSEMBLY
i		1*		03579-046	ADAPTER
		1*		(6.2	SHOULDER HARNESS
		4*		AS24693S272	CLIP
		4*		N960JD10LL	SCREW
		4*		1S21042L3	WASHER
-					NUT
	-+			412-702-109B	HARNESS ASSEMBLY
-	-			3573-3	ADAPTER
				3579-045	SHOULDER HARNESS
				6.2	CLIP
				S24693S272	SCREW
				N960JD10LL	WASHER
			4* M	S21042L3	NUT
1	1	1	1 D	3542-1	BRACKET
1 - 1	1	1		3571-3	GUIDE
	1	1		3610-041	BRACKET
	1	1		3618-1	CAP
	2			N4-10A	BOLT
	1		The second second	14-44A	BOLT
		1		S24693S274	
	3		Dead Co	V960JD416	SCREW
				1960JD416L	WASHER WASHER
			The second second		WWA Shall I

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-0-01

BY D. SHEPHORD (DE # 02)

DATE: CERT. NO.: ISSUE NO:

07.11.21 SH04-7 *Denotes that part is included with assembly above

DESIGN	LE	DART AEROSPACE LTD	
DRAWN	LE	HAWKESBURY, ONTARIO, CANADA	
CHECKED	B	DRAWING NO.	
MFG. APPR.	N/A	DSI 9397	REV. A
APPROVED	1	TITLE	ET 3 OF 3
DE APPR.	-11	SHOULDER HARNESS KITS	SCALE
DATE 07.1	1.21	THIS DOCUMENT IS PRINTED AND THE PROSPACE LTD. THIS DOCUMENT IS PRINTED AND CONTROL THAT AND IT BURNERS ON THE EXPRESS CONDITION TO BE USED FOR ANY PURPOSE OF COPIED OF COMMINICATION TO ANY OTHER PERSONS OFFICIAL PROPERTY AND CONTROL WHITEN PERSONS OFFICIAL PROPERTY AND CONTROL THE PERSONS OFFICIAL PROPERTY AND CONTROL PR	

W/O:			W	ORK ORDER CHANG	ES			•	, p
DATE	STEP	PROC	EDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
									U
Part No		PAR #:							
	R	esolution:	Dispositio	n:	QA: N/C CI	osed:		Date:	
NCR:		W	ORK ORD	ER NON-CONFORMA	NCE (NCR)			1,1
DATE	STEP	Description of NC		Corrective Action Section	on B	Verifica		tion Approval	Approval
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section		Chief Eng	QC Inspector
								Ĭ	
		1-4		PC					
14	See								fi =

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-702 REV. D & FERENCE ONLY

REF. CANADIAN STC: SH04-7 REF. FAA STC: SR01997NY EASA STC: EASA.IM.R.S.00710

DSI9408-011/-013/-015/-017 Hook and Loop Strip Kits are available to upgrade existing D412-702-041A/-043A/-045A/-049A/-051A/-051B/-052A/-052B 3-Point Shoulder Harness Kits at CHG 001 and D412-702-041B/-043B/-045B/-049B 3-Point Shoulder Harness Kits at CHG 002. The DSI9408-011/-013/-015/-017 kits are included in -049B kits at CHG 003.

The DSI9408 kits provide D3761-1-041 hook and loop strips that help prevent passengers from inadvertently pulling the shoulder belts out of the D3571-1/-3 guides. Installation of the D3761-1-041 hook and loops strips is optional.

The D3761-1-041 hook and loop strip is installed by wrapping the strip tightly around the front face of the D3571-1/-3 guide so that the "loop" side of the strip is exposed to the shoulder belt as shown in the figure below. The kits are as follows:

QTY -011	-013	QTY -015	QTY -017	Part Number	Description
X				DSI9408-011	9-Man Hook and Loop Strip Kit Upgrades D412-702-041A kits at CHG 001 Upgrades D412-702-041B kits at CHG 002
9-1	X			DSI9408-013	5-Man Hook and Loop Strip Kit Upgrades D412-702-043A Kits at CHG 001 Upgrades D412-702-043B Kits at CHG 002
THE TO	10.2	х		DSI9408-015	4-Man Hook and Loop Strip Kit Upgrades D412-702-047A Kits at CHG 001 Upgrades D412-702-047B Kits at CHG 002
	£.1.≅.1			i i	1-Man Hook and Loop Strip Kit Upgrades D412-702-049A Kits at CHG 004
2			X/	DSI9408-017	Upgrades D412-702-049B Kits at CHG 002 Upgrades D412-702-051A Kits at CHG 001 Upgrades D412-702-051B Kits at CHG 001 Upgrades D412-702-052A Kits at CHG 001 Upgrades D412-702-052B Kits at CHG 001
9	5	4	1	D3761-1-041	Hook and Loop Strip

PORTION OF D3571-1/-3 GUIDE THAT SHOULDER BELT PASSES THROUGH
(REF)

D3761-1-041 HOOK & LOOP STRIP
(ENSURE THAT 'LOOP' SIDE IS EXPOSED TO SHOULDER BELT)

D3571-1/-3 GUIDE

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-0-01

D. SHEPHERD (DE # 02)

DATE: 08.03.05

CERT. NO: SH04-7

ISSUE NO: 3

A	NEW IS	SHE		1		
REV.	1121110	OOL	the state of the s	LE	08.03.05	
			DESCRIPTION	BY	DATE	
DESIGN		LE	DART AEROSP HAWKESBURY, ONTAR	ACE	LTD	
CHECKE	ED	-	DRAWING NO.			
MFG. AF		N/A	DSI 9408	REV. A		
APPRO	CONTRACT OF THE PARTY OF THE PA	The state of	TITLE		SCALE	
DE APP	₹.	THE	HOOK AND LOOP STRIP		NTS	
DATE	08.03	3.05	COPYRIGHT © 2008 BY DART A THIS DOCUMENT IS PRIVATE AND COMPRESENT		LTD	

Dart	Aerospace	Ltd
------	-----------	-----

W/O:			V	VORK ORDER CHANGES				- 1	74	
DATE	STEP	PROC	EDURE CH	HANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
								SERVING.		
Part No		PAR #:								
	R	esolution:	Disposit	ion: Q	A: N/C CI	osed:	sed: Date: _			
NCR:		W	ORK OR	DER NON-CONFORMANC	E (NCR)	-1		2	
DATE	STEP	Description of NC		Corrective Action Section B		Verific	ation	Approval	Approval	
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section		Chief Eng	QC Inspector	
								# 11		

Status	Item ID	Rev	Name	Start Date	Quantity I	e UOM	Scrap %	Route Seq II	Sort	Comments	Date Last Mod	Add Date
1	AN4-10A		Bolt	01/01/2008	2.000	0 Each	0 %	110	0	0.1	05/12/2009 7:16 PM	05/12/2
1	AN4-44A		Bolt	13/04/2010	1.000	0 Each	0 %	110	0	a)	13/04/2010 2:01 PM	13/04/2
1	AN960JD416		Washer	01/01/2008	3.000	0 Each	0 %	110	0	a)	05/12/2009 7:16 PM	05/12/2
8	AN960JD416L		Washer	01/01/2008	2.000	0 Each	0 %	110	0	a] -	05/12/2009 7:16 PM	05/12/2
1	D3542-1		Bracket	05/12/2009	1.000	0 Each	0 %	110	0	(1)	05/12/2009 8:29 PM	05/12/2
(4)	D3571-3		Guide	05/12/2009	1.000	0 Each	0 %	110	0	a)	05/12/2009 8:30 PM	05/12/2
8	D3610-041		Bracket	05/12/2009	1.000	0 Each	0 %	110	0	47	05/12/2009 8:30 PM	05/12/2
(4)	D3618-1		CAP	05/12/2009	1.000	0 Each	0 %	110	0	a)	05/12/2009 8:30 PM	05/12/2
S	D3761-1-041		HOOK & LOOP STRIP	05/12/2009	1.000	0 Each	0 %	110	0	a)	05/12/2009 8:31 PM	05/12/2
8	D412-702-109B		Harness Assembly	01/01/2008	1.000	0 Each	0 %	110	0	٥٦	05/12/2009 7:16 PM	05/12/2
0	MS21042L4		Nut	01/01/2008	3.000	0 Each	0 %	110	0	a	05/12/2009 7:16 PM	05/12/2
1	MS24693-S274		Screw	01/01/2008	1.000	0 Each	0 %	110	0	97	05/12/2009 7:16 PM	05/12/2



7 deadly wastes

- 1. Overproduction
 - 2. Rework
- 3. Transportation
- 4. Inappropriate / over Processing
 - 5. Unnecessary Inventory
 - 6. Delays / Waiting
 - 7. Unnecessary Motions